

Jenny Lee

📍 194 Erb Street West, Waterloo, ON | N2L 0L6

✉ jenny.jeeun@gmail.com | 📞 +1 (403) 969-0567 | 🌐 [jlee2843](#) | [in jennyjeeun](#) | [Portfolio](#)

Work Experience

Ciena Corporation | Ottawa, ON

07/2024 - Present

MLOps Engineer

Python, MLflow, Jenkins, Fast API, Docker, Angular, AWS SageMaker

- Developed and deployed an internal **LiteLLM**-powered AI Agent via **MCP server** to drive a DevOps **intelligent notification system**, leveraging LLM-based build log analysis and a Milvus-backed RAG layer to generate contextual, actionable failure notifications, with continuous evaluation to monitor and improve notification quality.
- Contributed to the design and delivery of a secure, **RAG-based** internal chatbot for the ASICS team, implementing an Open WebUI front end and a FastAPI-based LLM inference service, with ingestion pipelines for confidential content from PDFs, Word documents, Microsoft Teams, and Confluence.
- Built an end-to-end user **feedback loop** (Angular UI + FastAPI) that collects annotations and launches Jenkins-managed CI/CD pipelines for continuous training, with experiments tracked in **MLflow**.
- Secured the **FastAPI** backend by integrating **LDAP** for user authentication and leveraging **HashiCorp Vault** for dynamic secrets management, ensuring secure, role-based access to the API.
- Designed a real-time **XGBoost** classifier for log analysis, integrated with CI/CD and Jira workflows, to automatically deduplicate DevOps error signals and suppress redundant alerts, substantially reducing tickets raised and improving triage efficiency.

University of British Columbia, Center of Sustainability | Vancouver, BC

08/2022 - 04/2024

Data and Reporting Analyst [GitHub](#)

Python, R, Git, GitHub, Docker, Plotly Dash

- Designed and automated an **ETL data pipeline** (Python, Pandas, SQLAlchemy) for data integration and data quality management; processed, cleansed, and normalized procurement data from PostgreSQL to build a validated data model for emissions analysis.
- Developed **regularized regression (LASSO, Ridge)** and **GLMs** using **Scikit-learn** to forecast emissions trajectories under varying procurement scenarios, evaluating progress against established sustainability goals.
- Deployed a **web application** using Plotly Dash for interactive data exploration, enabling users to filter and identify climate-friendly food options to support sustainability goals.

Teck Resources Limited | Vancouver, BC

01/2023 - 08/2023

Data Scientist Intern

Python, SQL, Docker, Git, GitHub, Databricks, AWS Services (S3, EC2)

- Engineered a scalable data processing pipeline on **Databricks** using **Apache Spark** to ingest and transform raw data from AWS S3, creating optimized, model-ready datasets for downstream machine learning workflows.
- Implemented a proactive **model risk management strategy** by developing an automated script to combat data drift, which re-centered feature distributions (median shift adjustment) to maintain production model reliability.
- **Optimized** model inference performance by benchmarking lightweight, interpretable **ML models** (Logistic Regression, DBSCAN) as replacements for a BERT model, successfully identifying solutions to reduce inference latency and compute costs.

Education

University of Waterloo

2025 - Current

[Master of Mathematics](#) | [Self-Made Learning Notes](#)

University of British Columbia

2023 - 2024

[Master of Data Science](#) | [Link to all courses](#)

Technical Skills

Languages	Python, SQL, R, MATLAB, Java, Dr.Racket
Libraries & Tools	PyTorch, Tensorflow, Keras, Scikit-learn, Sktime, Spark, Git, PowerBI, Pandas, Numpy, Matplotlib, Seaborn, Plotly, Docker, AWS, Azure, Altair, Databricks, Jupyter Notebook, MLOps
Dashboards	Plotly Dash, Streamlit, Shiny (R), Tableau, PowerBI, Superset
Concepts	Machine Learning, Neural Networks, API Design, Cloud Computing, Data Engineering, NLP

Projects

Pythoshop: Python Graphics Package – Software Package Development GitHub	<i>Python, CI/CD, Docker</i>	2024
Alternative Recipe – Climate Change-Makers Challenge Winner GitHub	<i>Python, Streamlit</i>	2023
Credit Card Fraud Detection – Fraud Detection Machine Learning Challenge GitHub	<i>Python, Jupyter Book, Docker</i>	2023
Misinformation Analysis – CANIS Hackathon Special Awards Winner GitHub	<i>Python, Plotly Dash, Heroku</i>	2023
Air and Water Quality Across Canada GitHub	<i>Python, Plotly</i>	2023